

WHAT IS CLAIMED IS:

1. A method of driving an electronic circuit including a first transistor having a first terminal and a second terminal, a capacitor coupled to a first control terminal of the first transistor, a second transistor that controls the electrical connection between the first terminal and the capacitor, the second transistor having a third terminal and a fourth terminal, and a third transistor having a fifth terminal and a sixth terminal, the method comprising:

a first step of turning on the second transistor and the third transistor, supplying a signal via the sixth terminal and the fifth terminal so that a charge corresponding to the signal is accumulated in the capacitor, and setting a conduction state of the first transistor according to the signal; and

a second step of turning off the third transistor and turning on the second transistor to change the conduction state, set in the first step, of the first transistor.

2. The method of driving an electronic circuit according to Claim 1, the first transistor being turned off in the second step.

3. The method of driving an electronic circuit according to Claim 1, the second terminal of the first transistor being electrically coupled to a predetermined potential, and a potential that is different from the predetermined potential being applied to the first control terminal in the second step.

4. The method of driving an electronic circuit according to Claim 3, the potential applied to the first control terminal in the second step being a potential obtained by subtracting a threshold voltage of the first transistor from the predetermined potential or a potential obtained by adding the threshold voltage of the first transistor to the predetermined potential.

5. The method of driving an electronic circuit according to Claim 1, an electronic element being connected to the first transistor.

6. The method of driving an electronic circuit according to Claim 5, wherein, in the second step, the first transistor is turned off by the potential applied to the first control terminal of the first transistor, which resets an operation of the electronic element.

7. The method of driving an electronic apparatus including a plurality of first signal lines, a plurality of second signal lines, a plurality of third signal lines, a power-supply line, and a plurality of unit circuits,

each of the plurality of unit circuits including a first transistor having a first terminal and a second terminal, a capacitor coupled to a first control terminal of the first transistor, a second transistor that controls electrical connection between the first terminal and the capacitor, the second transistor having a third terminal and a fourth terminal, and a third transistor having a fifth terminal and a sixth terminal;

and a second control terminal of the second transistor being coupled to one of the plurality of second signal lines, a third control terminal of the third transistor is connected to one of the plurality of first signal lines, and the sixth terminal is connected to one of the plurality of third signal lines,

the method comprising:

a first step of accumulating a signal supplied via one of the third signal lines in the capacitor as a charge while the second transistor and the third transistor are both on, and setting a conduction state of the first transistor according to the signal; and

a second step of turning off the third transistor and turning on the second transistor, and supplying an amount of charge that causes reduction in the conduction state, set in the first step, of the first transistor.

8. The method of driving an electronic apparatus according to Claim 7, the first transistor being turned off in the second step.
9. A method of driving an electronic apparatus according to Claim 7, the second terminal of the first transistor being electrically coupled to a predetermined potential, and a potential that is different from the predetermined potential being applied to the first control terminal in the second step.

10. A method of driving an electronic apparatus according to Claim 9, the potential applied to the first control terminal in the second step being a potential obtained by subtracting a threshold voltage of the first transistor from the predetermined potential or a potential obtained by adding the threshold voltage of the first transistor to the predetermined potential.

11. A method of driving an electronic apparatus according to Claim 7, an electronic element being coupled to the first transistor.
12. A method of driving an electronic apparatus according to Claim 11, wherein, in the second step, the first transistor is turned off by the potential applied to the first control terminal of the first transistor, thereby resetting an operation of the electronic element.

13. A method of driving an electro-optical apparatus including n rows of scanning lines each including a first subscanning line and a second subscanning line, m columns of data lines, a power-supply line, and a plurality of unit circuits arranged in n rows and m columns in association with intersections of the scanning lines and the data lines,

each of the plurality of unit circuits including a first transistor having a first terminal and a second terminal, a capacitor coupled to a first control terminal of the first transistor, a second transistor that controls the electrical connection between the first terminal and the capacitor, the second transistor having a third terminal and a fourth terminal, a third transistor having a fifth terminal and a sixth terminal, and an electro-optical element connected to the first transistor;

and a second control terminal of the second transistor being coupled to the second subscanning line of one of the n rows of scanning lines, a third control terminal of the third transistor is coupled to the first subscanning line of the one of the n rows of scanning lines, and the sixth terminal is connected to one of the m columns of data lines,

the method comprising:

a first step of accumulating a data signal supplied via one of the m columns of data lines in the capacitor as a charge while the second transistor and the third transistor are both on, and setting a conduction state of the first transistor according to the data signal; and

a second step of turning off the third transistor and turning on the second transistor, and supplying an amount of charge that causes reduction in the conduction state, set in the first step, of the first transistor.

14. The method of driving an electro-optical apparatus according to Claim 13, the first transistor being turned off in the second step.

15. The method of driving an electro-optical apparatus according to Claim 13, the second terminal of the first transistor being electrically coupled to a predetermined potential,

and a potential that is different from the predetermined potential being applied to the first control terminal in the second step.

16. The method of driving an electro-optical apparatus according to Claim 15, the potential applied to the first control terminal in the second step being a potential obtained by subtracting a threshold voltage of the first transistor from the predetermined potential or a potential obtained by adding the threshold voltage of the first transistor to the predetermined potential.

17. The method of driving an electro-optical apparatus according to Claim 13,

wherein, in the second step, the first transistor is turned off by the potential applied to the first control terminal, thereby stopping supply of a current to the electro-optical element.

18. The method of driving an electro-optical apparatus according to Claim 13, vertical scanning in which the n rows of scanning lines are sequentially selected one by one being performed at least twice in one frame period,

wherein, in the first time of vertical scanning, when one of a first set of scanning lines including either scanning lines on odd-numbered rows or scanning lines on even-numbered rows among the n rows of scanning lines is selected, the conduction state of the first transistor of each of the one row of unit circuits coupled to the selected scanning line, among the plurality of unit circuits, is set according to the data signal, and when one of a second set of scanning lines including either the scanning lines on the odd-numbered rows or the scanning lines on the even-numbered rows, not included in the first set, is selected, the second transistor of each of the one row of unit circuits coupled to the selected scanning line is turned on to turn off the first transistor,

and wherein, in the second time of vertical scanning, when one of the second set of scanning lines including either the scanning lines on odd-numbered rows or the scanning lines on even-numbered rows among the n rows of scanning lines is selected, the conduction state of the first transistor of each of the one row of unit circuits coupled to the selected scanning line is set according to the data signal, and when one of the first set of scanning lines including either the scanning lines on the odd-numbered rows or the scanning lines on the even-numbered rows, not included in the second set, is selected, the second transistor of each of the one row of unit circuits coupled to the selected scanning line is turned on to turn off the first transistor.

19. A method of driving an electro-optical apparatus according to Claim 13, wherein, in one frame period, a set operation and a reset operation are executed alternately each time a scanning line is selected, the set operation causing the conduction state of the first transistor of each of unit circuits on one row connected to the selected scanning line, among the plurality of unit circuits, to be set according to the data signal, and the reset operation causing the second transistor of each of the unit circuits on one row coupled to the selected scanning line to be turned on to thereby turn off the first transistor.

20. A method of driving an electro-optical apparatus according to Claim 19,

scanning lines on which the set operation is executed and scanning lines on which the reset operation is executed being each selected sequentially from the plurality of scanning lines.

21. A method of driving an electro-optical apparatus according to Claim 13, the electro-optical elements including three types of light-emitting elements that emit light in red, green, and blue, respectively,

and the unit circuits coupled to each of the n rows of scanning lines include one type of light-emitting elements that emit light in the same color among the three types of light-emitting elements.

22. A method of driving an electronic circuit including a first transistor having a first terminal and a second terminal, a second transistor having a third terminal and a fourth terminal, a capacitor commonly coupled to a first control terminal of the first transistor and a second control terminal of the second transistor, a third transistor that controls electrical connection between the third terminal and the second control terminal of the second transistor, the third transistor having a fifth terminal and a sixth terminal; and a fourth transistor having a seventh terminal and an eighth terminal the method comprising:

a first step of turning on the third transistor and the fourth transistor, supplying a signal via the eighth terminal and the seventh terminal so that a charge corresponding to the signal is accumulated in the capacitor, and setting conduction states of the second transistor and the first transistor according to the signal; and

a second step of turning off the fourth transistor and turning on the third transistor to change the conduction states, set in the first step, of the second transistor and the first transistor.

23. The method of driving an electronic circuit according to Claim 22, the first transistor being turned off in the second step.

24. The method of driving an electronic circuit according to Claim 22, the second terminal of the first transistor being electrically coupled to a predetermined potential,

and a potential that is different from the predetermined potential being applied to the first control terminal in the second step.

25. A method of driving an electronic circuit according to Claim 22, an electronic element being connected to the first transistor.

26. A method of driving an electronic circuit according to Claim 25,

wherein, in the second step, the first transistor being turned off by the potential applied to the first control terminal, thereby resetting an operation of the electronic element.

27. A method of driving an electronic apparatus including a plurality of first signal lines, a plurality of second signal lines, a plurality of third signal lines, a power-supply line, and a plurality of unit circuits,

each of the plurality of unit circuits including a first transistor having a first terminal and a second terminal, a second transistor having a third terminal and a fourth terminal, a capacitor commonly coupled to a first control terminal of the first transistor and a second control terminal of the second transistor, a third transistor that controls electrical connection between the third terminal and the second control terminal of the second transistor, the third transistor having a fifth terminal and a sixth terminal, and a fourth transistor having a seventh terminal and an eighth terminal;

a third control terminal of the third transistor being coupled to one of the plurality of second signal lines, a fourth control terminal of the fourth transistor being coupled to one of the plurality of first signal lines, and the eighth terminal being coupled to one of the plurality of second signal lines,

the method comprising:

a first step of accumulating a signal supplied via one of the plurality of third signal lines in the capacitor as a charge while the third transistor and the fourth transistor are both on, and setting a conduction state of the first transistor according to the signal; and

a second step of turning off the fourth transistor and turning on the third transistor, and supplying an amount of charge that causes reduction in the conduction state, set in the first step, of the first transistor to the capacitor.

28. A method of driving an electro-optical apparatus including n rows of scanning lines each including a first subscanning line and a second subscanning line, m columns of data lines, a power-supply line, and a plurality of unit circuits arranged in n rows and m columns in association with intersections of the scanning lines and the data lines,

each of the plurality of unit circuits including a first transistor having a first terminal and a second terminal, a second transistor having a third terminal and a fourth terminal, a capacitor commonly coupled to a first control terminal of the first transistor and a second control terminal of the second transistor, a third transistor that controls electrical connection between the third terminal and the second control terminal of the second transistor, the third transistor having a fifth terminal and a sixth terminal, a fourth transistor

having a seventh terminal and an eighth terminal, and an electro-optical element connected to the first transistor;

and a third control terminal of the third transistor being coupled to the second subscanning line of one of the n rows of scanning lines, a fourth control terminal of the fourth transistor being coupled to the first subscanning line of the one of the n rows of scanning lines, and the eighth terminal being coupled to one of the m columns of data lines,

the method comprising:

a first step of accumulating a data signal supplied via one of the m columns of data lines in the capacitor as a charge while the third transistor and the fourth transistor are both on, and setting conduction states of the second transistor and the first transistor according to the data signal; and

a second step of turning off the fourth transistor and turning on the third transistor, and supplying an amount of charge that causes reduction in the conduction states, set in the first step, of the second transistor and the first transistor to the capacitor.

29. The method of driving an electro-optical apparatus according to Claim 28, the electro-optical elements including three types of light-emitting elements that emit light in red, green, and blue, respectively,

and the unit circuits coupled to each of the n rows of scanning lines include one type of light-emitting elements that emit light in the same color among the three types of light-emitting elements.

30. The method of driving an electro-optical apparatus according to Claim 28, vertical scanning in which the n rows of scanning lines are sequentially selected one by one being performed at least twice in one frame period,

wherein, in the first time of vertical scanning, when one of a first set of scanning lines including either scanning lines on odd-numbered rows or scanning lines on even-numbered rows among the n rows of scanning lines is selected, the conduction state of the first transistor of each of the one row of unit circuits coupled to the selected scanning line, among the plurality of unit circuits, is set according to the data signal, and when one of a second set of scanning lines including either the scanning lines on the odd-numbered rows or the scanning lines on the even-numbered rows, not included in the first set, is selected, the second transistor of each of the one row of unit circuits coupled to the selected scanning line is turned on to turn off the first transistor,

and wherein, in the second time of vertical scanning, when one of the second set of scanning lines including either the scanning lines on the odd-numbered rows or the

scanning lines on the even-numbered rows among the n rows of scanning lines is selected, the conduction state of the first transistor of each of the one row of unit circuits coupled to the selected scanning line is set according to the data signal, and when one of the first set of scanning lines including either the scanning lines on the odd-numbered rows or the scanning lines on the even-numbered rows, not included in the second set, is selected, the second transistor of each of the one row of unit circuits coupled to the selected scanning line is turned on to turn off the first transistor.

31. The method of driving an electro-optical apparatus according to Claim 28, wherein, in one frame period, a set operation and a reset operation are executed alternately each time a scanning line is selected, the set operation causing the conduction state of the first transistor of each of unit circuits on one row coupled to the selected scanning line, among the plurality of unit circuits, to be set according to the data signal, and the reset operation causing the second transistor of each of the unit circuits on one row coupled to the selected scanning line to be turned on to thereby turn off the first transistor, whereby the light-emitting element stops emitting light.

32. The method of driving an electro-optical apparatus according to Claim 31, scanning lines on which the set operation is executed and scanning lines on which the reset operation is executed being each selected sequentially from the plurality of scanning lines.

33. A method of driving an electronic circuit including a first transistor having a first terminal and a second terminal, a capacitor coupled to a first control terminal of the first transistor, a second transistor that controls electrical connection between the first terminal and the capacitor, the second transistor having a third terminal and a fourth terminal, a third transistor electrically coupled to the fourth terminal via the capacitor and electrically coupled to the second terminal of the first transistor, the third transistor having a fifth terminal and a sixth terminal, and a fourth transistor having a seventh terminal coupled to the second terminal and having an eighth terminal, the method comprising:

a first step of turning on the second transistor and the third transistor, supplying a signal via the sixth terminal and the fifth terminal so that a charge corresponding to the signal is accumulated in the capacitor, and setting a conduction state of the first transistor according to the signal; and

a second step of turning off the fourth transistor to change the conduction state, set in the first step, of the first transistor.

34. A method of driving an electronic apparatus including a plurality of first signal lines, a plurality of second signal lines, a plurality of third signal lines, a power-supply line, and a plurality of unit circuits,

each of the plurality of unit circuits including a first transistor having a first terminal and a second terminal, a capacitor coupled to a first control terminal of the first transistor, a second transistor that controls electrical connection between the first terminal and the capacitor, the second transistor having a third terminal and a fourth terminal, a third transistor electrically coupled to the fourth terminal and the first control terminal of the first transistor via the capacitor, the third transistor having a fifth terminal and a sixth terminal, and a fourth transistor having a seventh terminal coupled to the second terminal and having an eighth terminal;

and a second control terminal of the second transistor is coupled to one of the plurality of second signal lines, a third control terminal of the third transistor is coupled to one of the plurality of first signal lines, and the sixth terminal is coupled to one of the plurality of third signal lines,

the method comprising:

a first step of accumulating a signal supplied via one of the third signal lines in the capacitor as a charge while the second transistor and the third transistor are both on, and setting a conduction state of the first transistor according to the signal; and

a second step of turning off the fourth transistor.

35. A method of driving an electro-optical apparatus including n rows of scanning lines each including a first subscanning line and a second subscanning line, m columns of data lines, a power-supply line, and a plurality of unit circuits arranged in n rows and m columns in association with intersections of the scanning lines and the data lines,

each of the plurality of unit circuits including a first transistor having a first terminal and a second terminal, a capacitor coupled to a first control terminal of the first transistor, a second transistor that controls electrical connection between the first terminal and the capacitor, the second transistor having a third terminal and a fourth terminal, a third transistor electrically coupled to the fourth terminal and the first control terminal of the first transistor via the capacitor, the third transistor having a fifth terminal and a sixth terminal, a fourth transistor having a seventh terminal coupled to the second terminal and having an eighth terminal, and an electro-optical element coupled to the first transistor;

and a second control terminal of the second transistor being coupled to the second subscanning line of one of the n rows of scanning lines, a third control terminal of the

third transistor being coupled to the first subscanning line of the one of the n rows of scanning lines, and the sixth terminal being coupled to one of the m columns of data lines,

the method comprising:

a first step of accumulating a data signal supplied via one of the m columns of data lines in the capacitor as a charge while the second transistor and the third transistor are both on, and setting a conduction state of the first transistor according to the data signal; and

a second step of turning off the fourth transistor.

36. An electronic device, wherein a driving method according to Claim 1 is used.